

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0065706; AI 19885; PER20080001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I.     **THE APPLICANT IS:**           City of Carencro  
  Manola Street Wastewater Treatment Plant  
  P.O. Drawer 10  
  Carencro, LA 70520
- II.    **PREPARED BY:**               Afton J. Bessix
- DATE PREPARED:**               April 15, 2008
- III.   **PERMIT ACTION:**           reissue LPDES permit LA0065706, AI 19885; PER20080001  
  
  LPDES application received: January 23, 2008  
  
  EPA has not retained enforcement authority.  
  
  LPDES permit issued: August 6, 2003  
  LPDES permit expired: August 31, 2008

### IV.    **FACILITY INFORMATION:**

- A.     The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving part of the City of Carencro.
- B.     The permit application does not indicate the receipt of industrial wastewater.
- C.     The facility is located on Manola St. in Carencro, Lafayette Parish.
- D.     The treatment facility consists of a 500,000 GPD extended aeration sewage treatment. Disinfection is by chlorination.
- E.     Outfall 001  
  

Discharge Location:   Latitude 30° 18' 19" North  
  Longitude 92° 1' 24" West

Description:           treated sanitary wastewater

Design Capacity:       0.5 MGD

Type of Flow Measurement which the facility is currently using:  
  Combination Totalizing Meter / Continuous Recorder

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**V. RECEIVING WATERS:**

The discharge is into an unnamed coulee, thence into Francois Coulee, thence into the Vermilion River in segment 060801 of the Vermilion - Teche Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 060801 of the Vermilion - Teche Basin are as indicated in the table below<sup>1/</sup>:

Overall Degree of Support for Segment 060801	Degree of Support of Each Use						
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Partial	Not Supported	Not Supported	Not Supported	N/A	N/A	N/A	Full

<sup>1/</sup>The designated uses and degree of support for Segment 060801 of the Vermilion - Teche Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

**VI. ENDANGERED SPECIES:**

The receiving waterbody, Subsegment 060801 of the Vermilion - Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 27, 2007 from Boggs (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

**VII. HISTORIC SITES:**

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

**VIII. PUBLIC NOTICE:**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

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Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Ms. Afton J. Bessix  
 Water Permits Division  
 Department of Environmental Quality  
 Office of Environmental Services  
 P. O. Box 4313  
 Baton Rouge, Louisiana 70821-4313

**IX. PROPOSED PERMIT LIMITS:**

Subsegment 060801, Vermilion River-Headwaters to Bayou Fusilier-Bourbeaux junction to New Flanders (Ambassador Caffery) Bridge, LA Hwy. 3073, is not listed on LDEQ's Final 2004 303(d) list as impaired. However, subsegment 060801 was previously listed as impaired for phosphorus, nitrogen, organic enrichment/low DO, pathogen indicators, suspended solids/ turbidity/siltation, and carbofuran, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for subsegment 060801:

1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen

This TMDL was revised in December 1999, and approved by EPA on April 5, 2001. This TMDL re-established that NPDES permits for individual point sources in the Vermilion Watershed should continue to be issued on the basis of flow rates as follows:

FLOW RATE

greater than 25,000 gpd

PERMIT LIMITSMay - Dec.: 10 mg/l CBOD<sub>5</sub>/5 mg/l NH<sub>3</sub>-N/5 mg/l DOJan. - April: 20 mg/l CBOD<sub>5</sub>/10 mg/l NH<sub>3</sub>-N/5 mg/l DO

25,000 gpd or less

secondary limits year round

Therefore, this discharge will be permitted accordingly.

TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin

As per the TMDL, "Point sources do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors and discharges of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocations for point source contributions were set to zero."

Therefore, TSS limits are being placed in this permit according to the current state water quality standards.

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Vermilion River TMDL for Fecal Coliform

The *Vermilion River TMDL for Fecal Coliform* was finalized on April 5, 2001, addressing the presence of pathogen indicators in the watershed. As per this TMDL, "...there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Therefore, Fecal Coliform effluent limitations will be permitted according to the current state water quality policy.

TMDL for the Pesticide Carbofuran in the Mermentau River and Vermilion-Teche River Basins

The *TMDL for the Pesticide Carbofuran in the Mermentau River and Vermilion-Teche River Basins* was finalized on March 21, 2002 and states that there are no known point sources of Carbofuran; therefore, no allocation was given to point source discharges in the Vermilion-Teche River Basin.

**Final Effluent Limits:****OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD <sub>5</sub>				
May – December	41.7	10 mg/l	15 mg/l	Limitations based upon <u>1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen</u> .
January – April	83.4	20 mg/l	30 mg/l	
TSS				
May – December	62.6	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
January – April	83.4	20 mg/l	30 mg/l	
Ammonia-Nitrogen				
May – December	20.9	5 mg/l	10 mg/l	Limitations based upon the <u>1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen</u> .
January – April	41.7	10 mg/l	20 mg/l	

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Dissolved Oxygen	---	5 mg/l	N/A	Limitations based upon the <u>1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen.</u>
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\*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD<sub>5</sub> and TSS in terms of concentration.

\*\*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

\*\*\* The previous permit contained a reporting requirement for sulfate, which was based upon the diversion of Atchafalaya River water into the Vermilion River. However, in a letter received by this Department on May 29, 2003, from Jane Watson, Chief – Ecosystems Protection Branch, EPA Region 6 expressed no objection to the proposed change. A letter dated November 13, 2003 provided notification to the permittee that the sulfate requirement was no longer applicable and the monitoring for sulfate could be discontinued.

**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**4) Total Residual Chlorine**

If chlorination is used to achieve the limitations on Fecal Coliform Bacteria, the effluent shall contain NO MEASURABLE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, NO MEASURABLE will be defined as less than 0.1 mg/l of chlorine. The TRC shall be monitored daily by grab sample.

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**X. PREVIOUS PERMITS:**

**LPDES Permit No. LA0065706:** Issued: August 6, 2003  
Expired: August 31, 2008

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg</u>	<u>Monthly Max</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD <sub>5</sub>				
May – December	10 mg/l	15 mg/l	1/week	3 Hr. Composite
January – April	20 mg/l	30 mg/l	1/week	3 Hr. Composite
TSS				
May – December	15 mg/l	23 mg/l	1/week	3 Hr. Composite
January – April	20 mg/l	30 mg/l	1/week	3 Hr. Composite
Ammonia-Nitrogen				
May – December	5 mg/l	10 mg/l	1/week	3 Hr. Composite
January – April	10 mg/l	20 mg/l	1/week	3 Hr. Composite
Dissolved Oxygen	---	5 mg/l	1/week	Grab
Total Residual				
Chlorine (TRC)	---	---	1/day	Grab
Fecal Coliform				
Colonies/100ml	200	400	1/week	Grab
pH (Standard Units)	---	---	1/week	Grab
Sulfate	Report	---	1/week	3 Hr. Composite

The permit contains pollution prevention language.

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates that an inspection was conducted on January 14, 2008 for this facility.

Inspector: Jason Broussard

Findings and/or Violations:

1. Permit is available, up-to-date and expires in August 2008.
2. DMR's, lab analysis sheets and flow sheets are available for review. Non-compliance reports are being submitted as required and available.
3. Facility has an extended aeration treatment plant with chlorine disinfection. Facility is neat and no spills or leaks were noted.
4. Effluent was clear at the time of inspection and the receiving ditch was free of sludge, foam and odors.
5. Hoh-Pak labs analyze dissolved oxygen, pH, TSS, Ammonia-Nitrogen, TRC, CBOD<sub>5</sub>, and fecal coliform. Facility has a letter from the department to discontinue the sulfate requirement in the permit.
6. Facility has overflows during periods of heavy rains. City performs smoke testing and sewer collection system improvements throughout the year. The aeration basin contains some foam and pin flock is noted in the clarifier. Facility pumps out sludge and hauls it to their oxidation pond.
7. File review from January 2007 thru September 2007 did not reveal any excursions. Facility does not have Municipal Water Pollution Prevention audit reports as required in the permit.

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**B) Compliance and/or Administrative Orders**

A review of the files indicates that an enforcement action was administered against this facility on May 21, 2007.

**LDEQ Issuance:**

## Findings of Fact:

1. Sewage was discharged from a malfunctioning lift station. Lift station was repaired.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning January 2006 through December 2007 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
Ammonia	001	July 2007	20.9 mg/l	21.5 mg/l

**XII. ADDITIONAL INFORMATION:**

The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.5 MGD.

Effluent loadings are calculated using the following example:

$$\text{CBOD}_5: 8.34 \text{ lb/gal} \times 0.5 \text{ MGD} \times 10 \text{ mg/l} = 41.7 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.5 and 1.0 MGD.

<u>Effluent Characteristic</u>	<u>Monitoring Requirements</u>	
	<u>Measurement</u>	<u>Sample</u>
<u>Frequency</u>		
Flow	Continuous	Recorder
CBOD <sub>5</sub>		
May – December	1/week	3 Hr. Composite
January – April	1/week	3 Hr. Composite
TSS		
May – December	1/week	3 Hr. Composite
January – April	1/week	3 Hr. Composite
Ammonia-Nitrogen		
May – December	1/week	3 Hr. Composite
January – April	1/week	3 Hr. Composite
Dissolved Oxygen	1/week	Grab

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Total Residual		
Chlorine (TRC)	1/day	Grab
Fecal Coliform		
Colonies/100m	1/week	Grab
pH (Standard Units)	1/week	Grab

**Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, general pretreatment language will be used due to the lack of either an approved or required pretreatment program.

**Pollution Prevention Requirements**

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

<b>Audit Period Begins</b>	<b>Audit Period Ends</b>	<b>Audit Report Completion Date</b>
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

**XIII. TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a reissue permit for the discharge described in this Statement of Basis.

**XIV. REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.



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LPDES Permit Application to Discharge Wastewater, City of Carencro, Manola Street Wastewater Treatment Plant, January 23, 2008.